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August 30, 2016

**VIA ELECTRONIC FILING**

The Honorable Jocelyn G. Boyd  
Chief Clerk/Administrator  
Public Service Commission of South Carolina  
101 Executive Center Drive, Suite 100  
Columbia, South Carolina 29210

Re: **Duke Energy Progress, LLC – Monthly Power Plant Performance  
Report  
Docket No. 2006-224-E**

Dear Mrs. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is the Monthly Power Plant Performance Report in Docket No. 2006-224-E for the month of July 2016.

Should you have any questions regarding this matter, please do not hesitate to contact me at 704.382.4499.

Sincerely,

Charles A. Castle

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff  
Mr. Jeffrey M. Nelson, Office of Regulatory Staff  
Ms. Shannon Bowyer Hudson, Office of Regulatory Staff  
Ms. Nanette Edwards, Office of Regulatory Staff  
Michael Seaman-Huynh, Office of Regulatory Staff  
Ms. Heather Shirley Smith, Duke Energy  
Mr. Scott Elliott, Elliott & Elliott, P.A.  
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC  
Mr. Gary Walsh, Walsh Consulting, LLC

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

**Period: July, 2016**

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Brunswick	1	None					
	2	None					
Harris	1	None					
Robinson	2	None					

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
July 2016**

**Lee Energy Complex**

<b>Unit</b>	<b>Duration of Outage</b>	<b>Type of Outage</b>	<b>Cause of Outage</b>	<b>Reason Outage Occurred</b>	<b>Remedial Action Taken</b>
1A	7/10/2016 9:40:00 AM To 7/13/2016 12:47:00 PM	Unsch	4520 Gen. Stator Windings; Bushings; And Terminals	Generator lockout due to 64G Relay(Generator Ground).	

**Mayo Station**

No Outages at Baseload Units During the Month.

**Richmond County Station**

<b>Unit</b>	<b>Duration of Outage</b>	<b>Type of Outage</b>	<b>Cause of Outage</b>	<b>Reason Outage Occurred</b>	<b>Remedial Action Taken</b>
7	7/3/2016 9:54:00 PM To 7/4/2016 9:41:00 PM	Unsch	5009 Other Gas Turbine Inlet Air Problems	Inlet Bleed Heat drain valve grounded MK6 system	
8	6/30/2016 6:13:00 PM To 7/1/2016 7:39:00 PM	Unsch	5120 Gas Turbine - Hydraulic Oil System	Hydraulic filter casing failed.	

**Roxboro Station**

<b>Unit</b>	<b>Duration of Outage</b>	<b>Type of Outage</b>	<b>Cause of Outage</b>	<b>Reason Outage Occurred</b>	<b>Remedial Action Taken</b>
4	7/18/2016 3:06:00 AM To 7/18/2016 5:26:00 AM	Unsch	3149 Condenser Loss of Vacuum	Turbine Trip to Low Condenser Vacuum	

**Sutton Energy Complex**

No Outages at Baseload Units During the Month.

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**July 2016  
Brunswick Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
<b>(A) MDC (mW)</b>	<b>938</b>	<b>932</b>		
<b>(B) Period Hours</b>	<b>744</b>	<b>744</b>		
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>704,133</b>	<b>100.90</b>	<b>678,410</b>	<b>97.84</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-6,261</b>	<b>-0.90</b>	<b>14,998</b>	<b>2.16</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>697,872</b>	<b>100.00%</b>	<b>693,408</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>		<b>99.58</b>
<b>(L) Output Factor (%)</b>		<b>100.90</b>		<b>97.84</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,260</b>		<b>10,512</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**July 2016  
Harris Nuclear Station**

**Unit 1**

<b>(A) MDC (mW)</b>	<b>928</b>	
<b>(B) Period Hours</b>	<b>744</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>695,043</b>	<b>100.67</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-4,611</b>	<b>-0.67</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>690,432</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>
<b>(L) Output Factor (%)</b>		<b>100.67</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,557</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**July    2016  
Robinson Nuclear Station**

**Unit 2**

<b>(A) MDC (mW)</b>	<b>741</b>	
<b>(B) Period Hours</b>	<b>744</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>551,596</b>	<b>100.05</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-292</b>	<b>-0.05</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>551,304</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>
<b>(L) Output Factor (%)</b>		<b>100.05</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,754</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
July 2016**

**Lee Energy Complex**

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
<b>(A) MDC (mW)</b>	177	176	179	378	910
<b>(B) Period Hrs</b>	744	744	744	744	744
<b>(C) Net Generation (mWh)</b>	109,301	123,418	124,515	249,822	607,056
<b>(D) Capacity Factor (%)</b>	83.00	94.25	93.50	88.83	89.66
<b>(E) Net mWh Not Generated due to Full Scheduled Outages</b>	0	0	0	0	0
<b>(F) Scheduled Outages: percent of Period Hrs</b>	0.00	0.00	0.00	0.00	0.00
<b>(G) Net mWh Not Generated due to Partial Scheduled Outages</b>	0	0	0	0	0
<b>(H) Scheduled Derates: percent of Period Hrs</b>	0.00	0.00	0.00	0.00	0.00
<b>(I) Net mWh Not Generated due to Full Forced Outages</b>	13,296	0	0	0	13,296
<b>(J) Forced Outages: percent of Period Hrs</b>	10.10	0.00	0.00	0.00	1.96
<b>(K) Net mWh Not Generated due to Partial Forced Outages</b>	0	0	0	7,136	7,136
<b>(L) Forced Derates: percent of Period Hrs</b>	0.00	0.00	0.00	2.54	1.05
<b>(M) Net mWh Not Generated due to Economic Dispatch</b>	9,091	7,526	8,661	24,274	49,552
<b>(N) Economic Dispatch: percent of Period Hrs</b>	6.90	5.75	6.50	8.63	7.32
<b>(O) Net mWh Possible in Period</b>	131,688	130,944	133,176	281,232	677,040
<b>(P) Equivalent Availability (%)</b>	89.90	100.00	100.00	97.46	96.98
<b>(Q) Output Factor (%)</b>	92.32	94.25	93.50	88.83	91.46
<b>(R) Heat Rate (BTU/NkWh)</b>	9,208	9,160	9,060	4,511	7,235

Footnote: (R) Includes Light Off BTU's  
Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
July 2016**

**Richmond County Station**

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	160	157	165	482
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	105,519	104,447	123,932	333,898
(D) Capacity Factor (%)	88.64	89.42	100.95	93.11
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	3,805	3,085	0	6,890
(J) Forced Outages: percent of Period Hrs	3.20	2.64	0.00	1.92
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	3,257	3,257
(L) Forced Derates: percent of Period Hrs	0.00	0.00	2.65	0.91
(M) Net mWh Not Generated due to Economic Dispatch	9,716	9,276	0	18,992
(N) Economic Dispatch: percent of Period Hrs	8.16	7.94	0.00	5.30
(O) Net mWh Possible in Period	119,040	116,808	122,760	358,608
(P) Equivalent Availability (%)	96.80	97.36	97.35	97.17
(Q) Output Factor (%)	92.53	93.40	100.95	95.77
(R) Heat Rate (BTU/NkWh)	11,703	11,477	0	7,288

Footnote: (R) Includes Light Off BTU's  
Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.



**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
July 2016**

**Richmond County Station**

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	178	178	250	606
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	124,839	126,171	178,810	429,820
(D) Capacity Factor (%)	94.27	95.27	96.13	95.33
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	7,593	6,261	7,190	21,044
(N) Economic Dispatch: percent of Period Hrs	5.73	4.73	3.87	4.67
(O) Net mWh Possible in Period	132,432	132,432	186,000	450,864
(P) Equivalent Availability (%)	100.00	100.00	100.00	100.00
(Q) Output Factor (%)	94.27	95.27	96.13	95.33
(R) Heat Rate (BTU/NkWh)	11,748	11,583	0	6,812

Footnote: (R) Includes Light Off BTU's  
Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
July 2016**

**Roxboro Station**

Unit 2

<b>(A) MDC (mW)</b>	671
<b>(B) Period Hrs</b>	744
<b>(C) Net Generation (mWh)</b>	416,939
<b>(D) Capacity Factor (%)</b>	83.52
<b>(E) Net mWh Not Generated due to Full Scheduled Outages</b>	0
<b>(F) Scheduled Outages: percent of Period Hrs</b>	0.00
<b>(G) Net mWh Not Generated due to Partial Scheduled Outages</b>	2,226
<b>(H) Scheduled Derates: percent of Period Hrs</b>	0.45
<b>(I) Net mWh Not Generated due to Full Forced Outages</b>	0
<b>(J) Forced Outages: percent of Period Hrs</b>	0.00
<b>(K) Net mWh Not Generated due to Partial Forced Outages</b>	0
<b>(L) Forced Derates: percent of Period Hrs</b>	0.00
<b>(M) Net mWh Not Generated due to Economic Dispatch</b>	80,059
<b>(N) Economic Dispatch: percent of Period Hrs</b>	16.04
<b>(O) Net mWh Possible in Period</b>	499,224
<b>(P) Equivalent Availability (%)</b>	99.55
<b>(Q) Output Factor (%)</b>	83.52
<b>(R) Heat Rate (BTU/NkWh)</b>	10,022

Footnote: (R) Includes Light Off BTU's  
Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
July 2016**

**Sutton Energy Complex**

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	179	179	264	622
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	122,651	123,458	167,956	414,065
(D) Capacity Factor (%)	92.10	92.70	85.51	89.48
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	10,525	9,718	28,460	48,703
(N) Economic Dispatch: percent of Period Hrs	7.90	7.30	14.49	10.52
(O) Net mWh Possible in Period	133,176	133,176	196,416	462,768
(P) Equivalent Availability (%)	100.00	100.00	100.00	100.00
(Q) Output Factor (%)	92.10	92.70	85.51	89.48
(R) Heat Rate (BTU/NkWh)	11,995	11,884	0	7,096

Footnote: (R) Includes Light Off BTU's  
Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Intermediate Power Plant Performance  
Review Plan  
July 2016**

**Mayo Station**

**Unit 1**

(A) MDC (mW)	727
(B) Period Hrs	744
(C) Net Generation (mWh)	321,702
(D) Net mWh Possible in Period	540,888
(E) Equivalent Availability (%)	92.85
(F) Output Factor (%)	59.48
(G) Capacity Factor (%)	59.48

Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Intermediate Power Plant Performance  
Review Plan  
July 2016**

	<b>Roxboro Station</b>	
	<b>Unit 3</b>	<b>Unit 4</b>
<b>(A) MDC (mW)</b>	691	698
<b>(B) Period Hrs</b>	744	744
<b>(C) Net Generation (mWh)</b>	401,392	365,322
<b>(D) Net mWh Possible in Period</b>	514,104	519,312
<b>(E) Equivalent Availability (%)</b>	99.49	87.71
<b>(F) Output Factor (%)</b>	78.08	70.57
<b>(G) Capacity Factor (%)</b>	78.08	70.35

Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**August 2015 - July 2016  
Brunswick Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
<b>(A) MDC (mW)</b>	<b>938</b>	<b>932</b>		
<b>(B) Period Hours</b>	<b>8784</b>	<b>8784</b>		
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>7,248,288</b>	<b>87.97</b>	<b>8,138,729</b>	<b>99.41</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>709,034</b>	<b>8.61</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>166,461</b>	<b>2.02</b>	<b>41,660</b>	<b>0.51</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>165,979</b>	<b>2.01</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-50,370</b>	<b>-0.61</b>	<b>6,299</b>	<b>0.08</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>8,239,392</b>	<b>100.00%</b>	<b>8,186,688</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>87.77</b>		<b>99.48</b>
<b>(L) Output Factor (%)</b>		<b>98.42</b>		<b>99.41</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,347</b>		<b>10,550</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**August 2015 - July 2016  
Harris Nuclear Station**

**Unit 1**

<b>(A) MDC (mW)</b>	<b>928</b>	
<b>(B) Period Hours</b>	<b>8784</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>8,346,240</b>	<b>102.39</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>5,461</b>	<b>0.07</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-200,149</b>	<b>-2.46</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>8,151,552</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>99.82</b>
<b>(L) Output Factor (%)</b>		<b>102.39</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,289</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

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**August 2015 - July 2016**  
**Robinson Nuclear Station**

**Unit 2**

<b>(A) MDC (mW)</b>	<b>741</b>	
<b>(B) Period Hours</b>	<b>8784</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>6,543,384</b>	<b>100.53</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>210,531</b>	<b>3.23</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>2,112</b>	<b>0.03</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-247,083</b>	<b>-3.79</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>6,508,944</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>96.48</b>
<b>(L) Output Factor (%)</b>		<b>103.89</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,337</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses



**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
August, 2015 through July, 2016**

**Lee Energy Complex**

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	196	195	197	378	967
(B) Period Hrs	8,784	8,784	8,784	8,784	8,784
(C) Net Generation (mWh)	1,325,648	1,350,068	1,378,389	2,533,237	6,587,342
(D) Capacity Factor (%)	76.96	78.78	79.54	76.21	77.56
(E) Net mWh Not Generated due to Full Scheduled Outages	95,205	109,884	70,381	465,227	740,697
(F) Scheduled Outages: percent of Period Hrs	5.53	6.41	4.06	14.00	8.72
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	56,863	56,863
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	1.71	0.67
(I) Net mWh Not Generated due to Full Forced Outages	34,196	9,102	1,570	0	44,868
(J) Forced Outages: percent of Period Hrs	1.99	0.53	0.09	0.00	0.53
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	21,246	21,246
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.64	0.25
(M) Net mWh Not Generated due to Economic Dispatch	267,527	244,738	282,509	247,427	1,042,201
(N) Economic Dispatch: percent of Period Hrs	15.53	14.28	16.30	7.44	12.27
(O) Net mWh Possible in Period	1,722,576	1,713,792	1,732,848	3,324,000	8,493,216
(P) Equivalent Availability (%)	92.15	93.04	95.87	83.66	89.83
(Q) Output Factor (%)	87.51	88.59	88.89	88.61	88.44
(R) Heat Rate (BTU/NkWh)	9,339	9,342	9,198	4,190	7,330

Footnote: (R) Includes Light Off BTU's  
Units in commercial operation for the full month are presented.  
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**Duke Energy Progress  
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**Richmond County Station**

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	172	170	169	512
(B) Period Hrs	8,784	8,784	8,784	8,784
(C) Net Generation (mWh)	1,243,052	1,232,522	1,399,195	3,874,769
(D) Capacity Factor (%)	82.25	82.40	94.17	86.24
(E) Net mWh Not Generated due to Full Scheduled Outages	112,480	97,214	95,194	304,888
(F) Scheduled Outages: percent of Period Hrs	7.44	6.50	6.41	6.79
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	16,122	16,122
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	1.09	0.36
(I) Net mWh Not Generated due to Full Forced Outages	4,138	12,134	1,793	18,065
(J) Forced Outages: percent of Period Hrs	0.27	0.81	0.12	0.40
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	3,974	3,974
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.27	0.09
(M) Net mWh Not Generated due to Economic Dispatch	151,562	153,954	0	275,079
(N) Economic Dispatch: percent of Period Hrs	10.03	10.29	0.00	6.12
(O) Net mWh Possible in Period	1,511,232	1,495,824	1,485,840	4,492,896
(P) Equivalent Availability (%)	91.70	92.13	91.92	92.36
(Q) Output Factor (%)	89.21	89.76	100.74	93.25
(R) Heat Rate (BTU/NkWh)	11,449	10,114	0	6,890

Footnote: (R) Includes Light Off BTU's  
Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

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**Richmond County Station**

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	193	193	248	634
(B) Period Hrs	8,784	8,784	8,784	8,784
(C) Net Generation (mWh)	1,419,372	1,421,419	1,855,221	4,696,012
(D) Capacity Factor (%)	83.74	83.87	85.05	84.29
(E) Net mWh Not Generated due to Full Scheduled Outages	107,805	110,090	194,388	412,283
(F) Scheduled Outages: percent of Period Hrs	6.36	6.50	8.91	7.40
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	3,563	8,036	40,164	51,763
(J) Forced Outages: percent of Period Hrs	0.21	0.47	1.84	0.93
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	216	216
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.01	0.00
(M) Net mWh Not Generated due to Economic Dispatch	164,140	155,334	91,419	410,894
(N) Economic Dispatch: percent of Period Hrs	9.68	9.16	4.19	7.38
(O) Net mWh Possible in Period	1,694,880	1,694,880	2,181,408	5,571,168
(P) Equivalent Availability (%)	93.65	93.32	89.18	91.67
(Q) Output Factor (%)	92.71	93.31	96.50	94.36
(R) Heat Rate (BTU/NkWh)	11,496	11,420	0	6,931

Footnote: (R) Includes Light Off BTU's  
Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

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**Roxboro Station**

Unit 2

<b>(A) MDC (mW)</b>	672
<b>(B) Period Hrs</b>	8,784
<b>(C) Net Generation (mWh)</b>	2,828,090
<b>(D) Capacity Factor (%)</b>	47.92
<b>(E) Net mWh Not Generated due to Full Scheduled Outages</b>	572,905
<b>(F) Scheduled Outages: percent of Period Hrs</b>	9.71
<b>(G) Net mWh Not Generated due to Partial Scheduled Outages</b>	4,275
<b>(H) Scheduled Derates: percent of Period Hrs</b>	0.07
<b>(I) Net mWh Not Generated due to Full Forced Outages</b>	69,741
<b>(J) Forced Outages: percent of Period Hrs</b>	1.18
<b>(K) Net mWh Not Generated due to Partial Forced Outages</b>	1,169
<b>(L) Forced Derates: percent of Period Hrs</b>	0.02
<b>(M) Net mWh Not Generated due to Economic Dispatch</b>	2,425,181
<b>(N) Economic Dispatch: percent of Period Hrs</b>	41.10
<b>(O) Net mWh Possible in Period</b>	5,901,360
<b>(P) Equivalent Availability (%)</b>	89.03
<b>(Q) Output Factor (%)</b>	68.83
<b>(R) Heat Rate (BTU/NkWh)</b>	10,332

Footnote: (R) Includes Light Off BTU's  
Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

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**Sutton Energy Complex**

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	198	198	265	662
(B) Period Hrs	8,784	8,784	8,784	8,784
(C) Net Generation (mWh)	1,336,039	1,404,936	1,694,192	4,435,167
(D) Capacity Factor (%)	76.78	80.74	72.71	76.33
(E) Net mWh Not Generated due to Full Scheduled Outages	131,394	101,983	65,547	298,923
(F) Scheduled Outages: percent of Period Hrs	7.55	5.86	2.81	5.14
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	111,367	111,367
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	4.78	1.92
(I) Net mWh Not Generated due to Full Forced Outages	173	1,814	2,578	4,566
(J) Forced Outages: percent of Period Hrs	0.01	0.10	0.11	0.08
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	272,538	231,411	456,236	960,185
(N) Economic Dispatch: percent of Period Hrs	15.66	13.30	19.58	16.53
(O) Net mWh Possible in Period	1,740,144	1,740,144	2,329,920	5,810,208
(P) Equivalent Availability (%)	93.10	93.70	92.30	92.86
(Q) Output Factor (%)	87.06	87.75	76.28	82.80
(R) Heat Rate (BTU/NkWh)	11,440	11,342	0	7,039

Footnote: (R) Includes Light Off BTU's  
Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Intermediate Power Plant  
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**Mayo Station**

<b>Units</b>	<b>Unit 1</b>
(A) MDC (mW)	735
(B) Period Hrs	8,784
(C) Net Generation (mWh)	1,892,001
(D) Net mWh Possible in Period	6,455,280
(E) Equivalent Availability (%)	86.43
(F) Output Factor (%)	51.63
(G) Capacity Factor (%)	29.31

Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Intermediate Power Plant  
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**Roxboro Station**

<b>Units</b>	<b>Unit 3</b>	<b>Unit 4</b>
(A) MDC (mW)	694	703
(B) Period Hrs	8,784	8,784
(C) Net Generation (mWh)	1,519,567	1,637,527
(D) Net mWh Possible in Period	6,095,280	6,178,656
(E) Equivalent Availability (%)	70.83	88.16
(F) Output Factor (%)	61.99	68.03
(G) Capacity Factor (%)	24.93	26.50

Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**July, 2016**

<u>Unit Name</u>	<u>Capacity Rating (mW)</u>	<u>Full Outage Hours</u>		<u>Total</u>
		<u>Scheduled</u>	<u>Unscheduled</u>	
Brunswick 1	938	0.00	0.00	0.00
Brunswick 2	932	0.00	0.00	0.00
Harris 1	928	0.00	0.00	0.00
Robinson 2	741	0.00	0.00	0.00



**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**July 2016**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Asheville Steam 1	189	0.00	84.42	84.42
Asheville Steam 2	189	0.00	5.38	5.38
Asheville CT 3	164	0.00	0.00	0.00
Asheville CT 4	160	0.00	0.00	0.00
Darlington CT 12	118	0.00	65.00	65.00
Darlington CT 13	116	32.78	15.83	48.62
Lee Energy Complex CC 1A	177	0.00	75.12	75.12
Lee Energy Complex CC 1B	176	0.00	0.00	0.00
Lee Energy Complex CC 1C	179	0.00	0.00	0.00
Lee Energy Complex CC ST1	378	0.00	0.00	0.00
Mayo Steam 1	727	0.00	0.00	0.00
Richmond County CC 1	157	0.00	2.25	2.25
Richmond County CC 2	156	0.00	0.00	0.00
Richmond County CC 3	155	0.00	0.00	0.00
Richmond County CC 4	159	0.00	0.00	0.00
Richmond County CC 6	153	0.00	0.00	0.00
Richmond County CC 7	160	0.00	23.78	23.78
Richmond County CC 8	157	0.00	19.65	19.65
Richmond County CC ST4	165	0.00	0.00	0.00
Richmond County CC 9	178	0.00	0.00	0.00
Richmond County CC 10	178	0.00	0.00	0.00
Richmond County CC ST5	250	0.00	0.00	0.00

Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**July 2016**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Roxboro Steam 1	379	0.10	82.47	82.57
Roxboro Steam 2	671	0.00	0.00	0.00
Roxboro Steam 3	691	0.00	0.00	0.00
Roxboro Steam 4	698	0.00	2.33	2.33
Sutton Energy Complex CC 1A	179	0.00	0.00	0.00
Sutton Energy Complex CC 1B	179	0.00	0.00	0.00
Sutton Energy Complex CC ST1	264	0.00	0.00	0.00
Wayne County CT 10	177	0.00	0.00	0.00
Wayne County CT 11	174	0.00	0.00	0.00
Wayne County CT 12	173	73.83	20.37	94.20
Wayne County CT 13	170	0.00	0.00	0.00
Wayne County CT 14	169	0.00	14.00	14.00

Units in commercial operation for the full month are presented.  
Pre-commercial or partial month commercial operations are not included.